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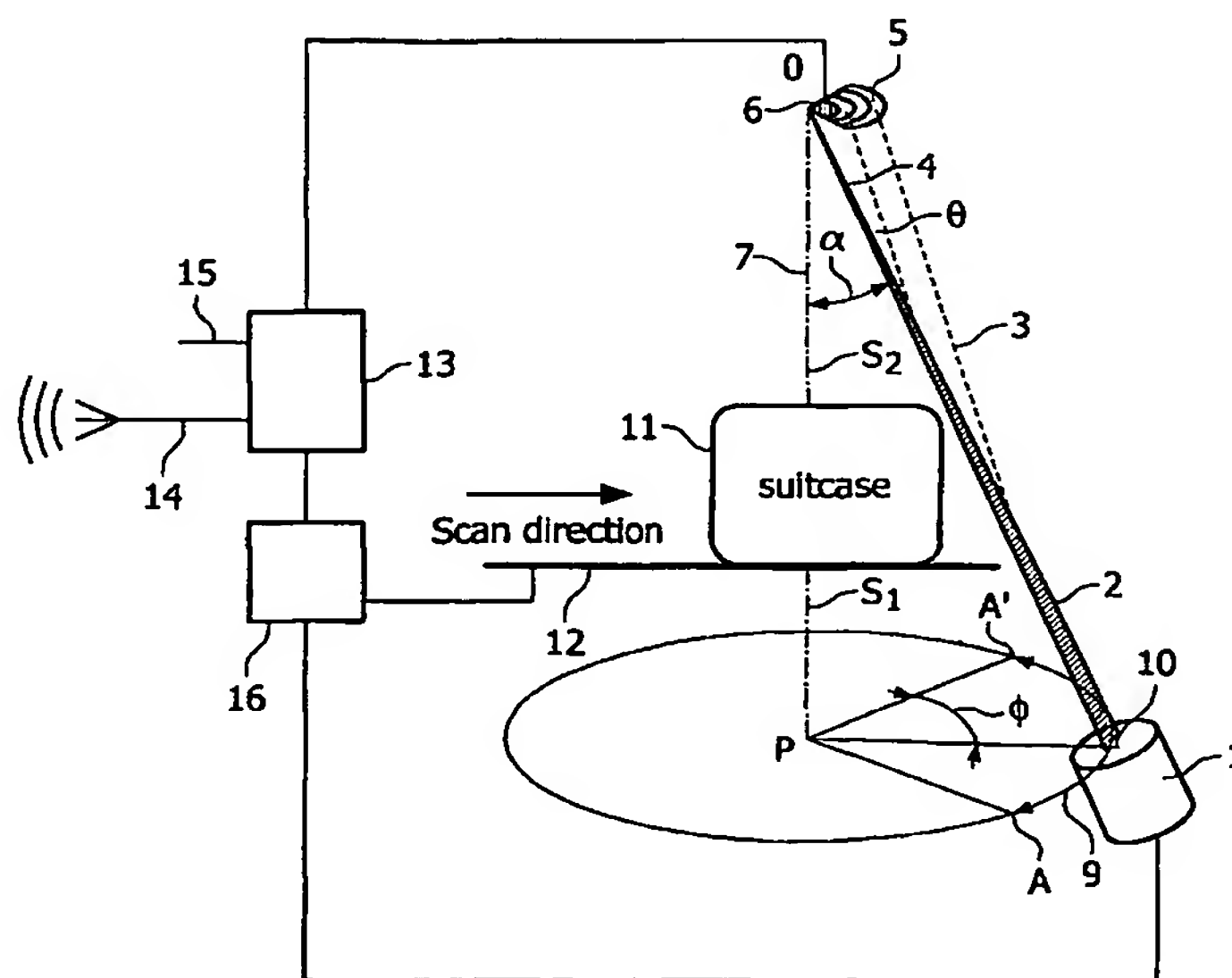
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(54) Title: **COMPUTED EXAMINATION OF AN OBJECT BY USING COHERENT-SCATTERED RADIATION**



(57) Abstract: Examination apparatus for baggage inspection are usually bulky and comprise mechanical components requiring precision movements. According to the present invention, examination of an object of interest is provided by moving a source of radiation (1) during scanning of the object of interest (11) and detecting a transmitted beam of radiation (4) and a scattered radiation (3), which is scattered by the object of interest (11) under a particular predetermined scatter angle, without moving the detector array (5,6). Advantageously, by detecting the scatter radiation scattered under the predetermined scatter angle, the vertical coordinate of the location of the scatter center in the object of interest and its composition may easily be derived.



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